



# Status Report: Salinas Valley Ground Water and SVWP

UCCE Irrigation and Nutrient  
Management Meeting

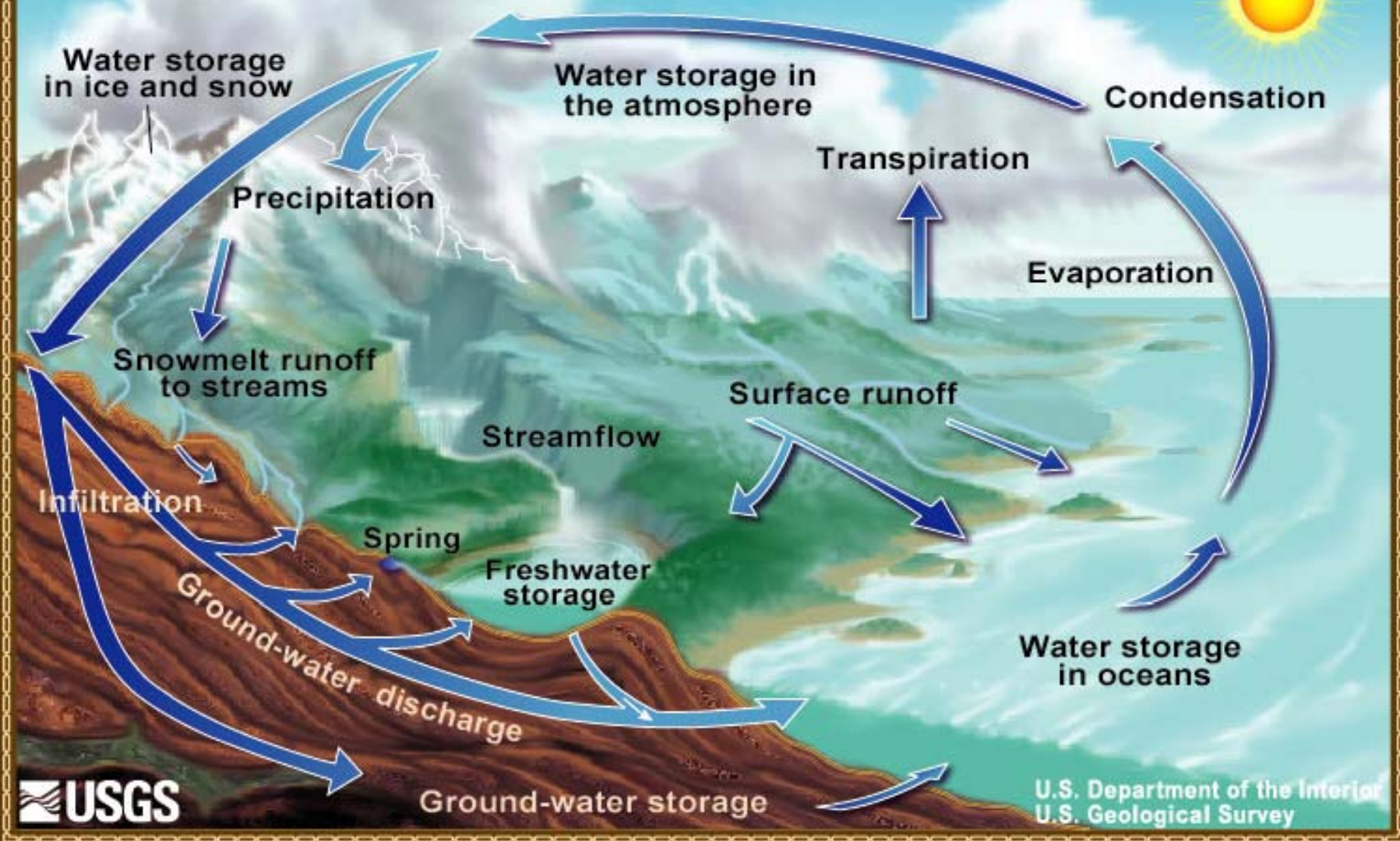
February 24, 2009



# Presentation

- Salinas Valley Ground Water
  - Where does ground water come from?
  - Ground-water Basins
    - Cross-Section of the SV
  - Current Ground water Levels
- Salinas Valley Water Project Update
  - Why build it?
  - Nacimiento Spillway Modification
  - Salinas River Diversion Facility

# The Water Cycle



 USGS

U.S. Department of the Interior  
U.S. Geological Survey



# Surface Water Supplies of Monterey County

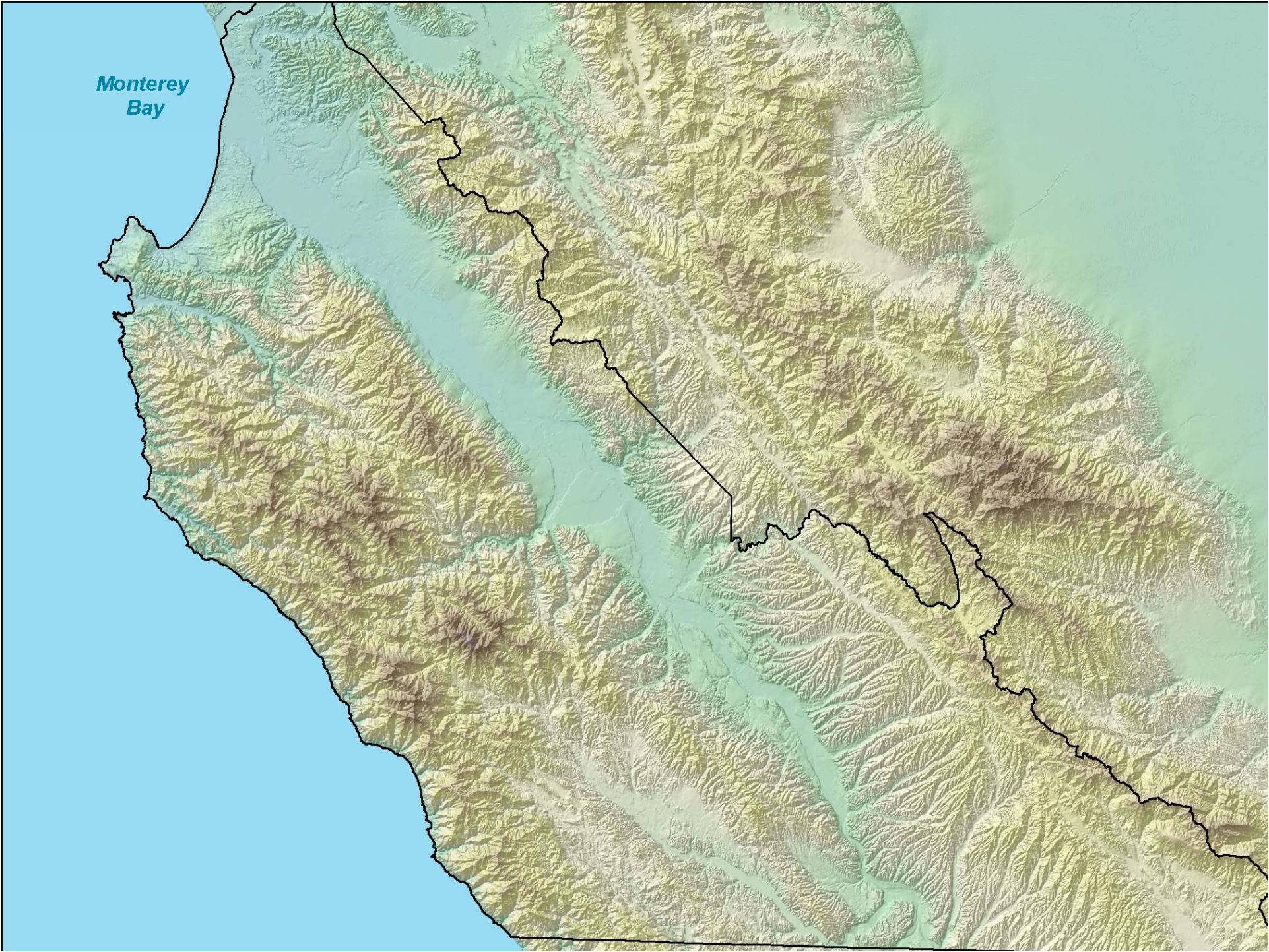




# Ground water Basins



*Monterey Bay*



# Hydrologic Subareas of the Salinas Valley

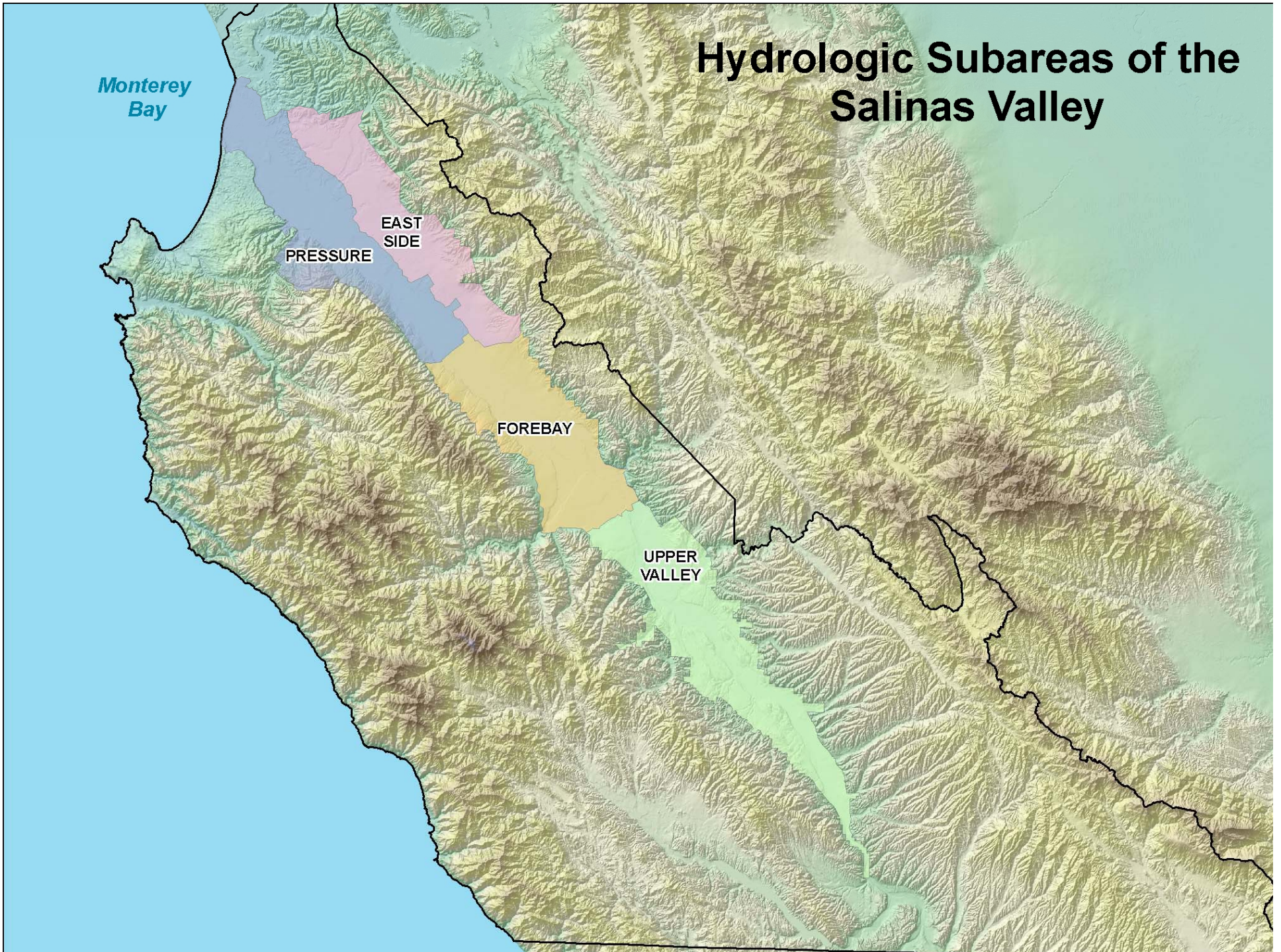
*Monterey Bay*

PRESSURE

EAST  
SIDE

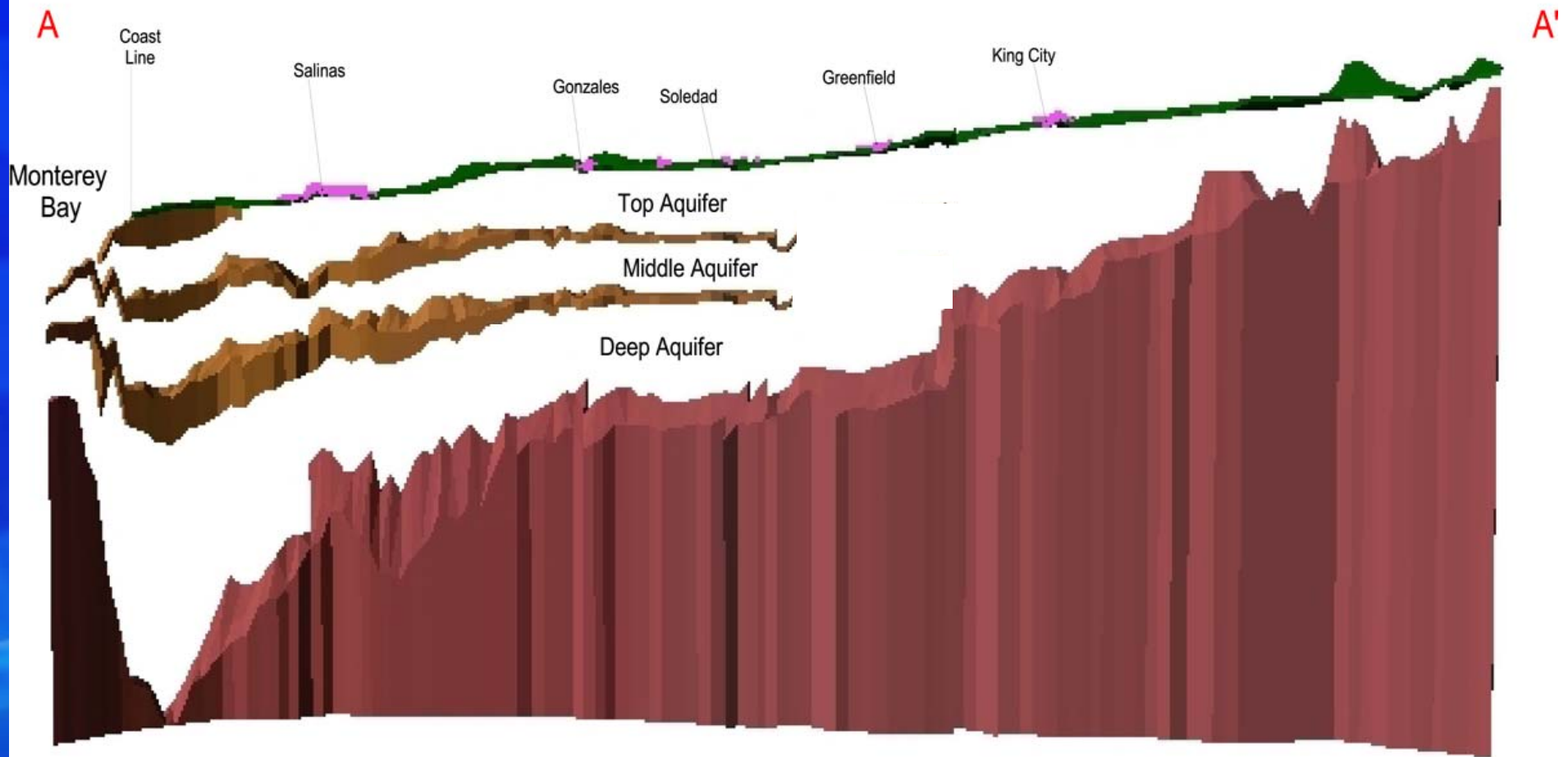
FOREBAY

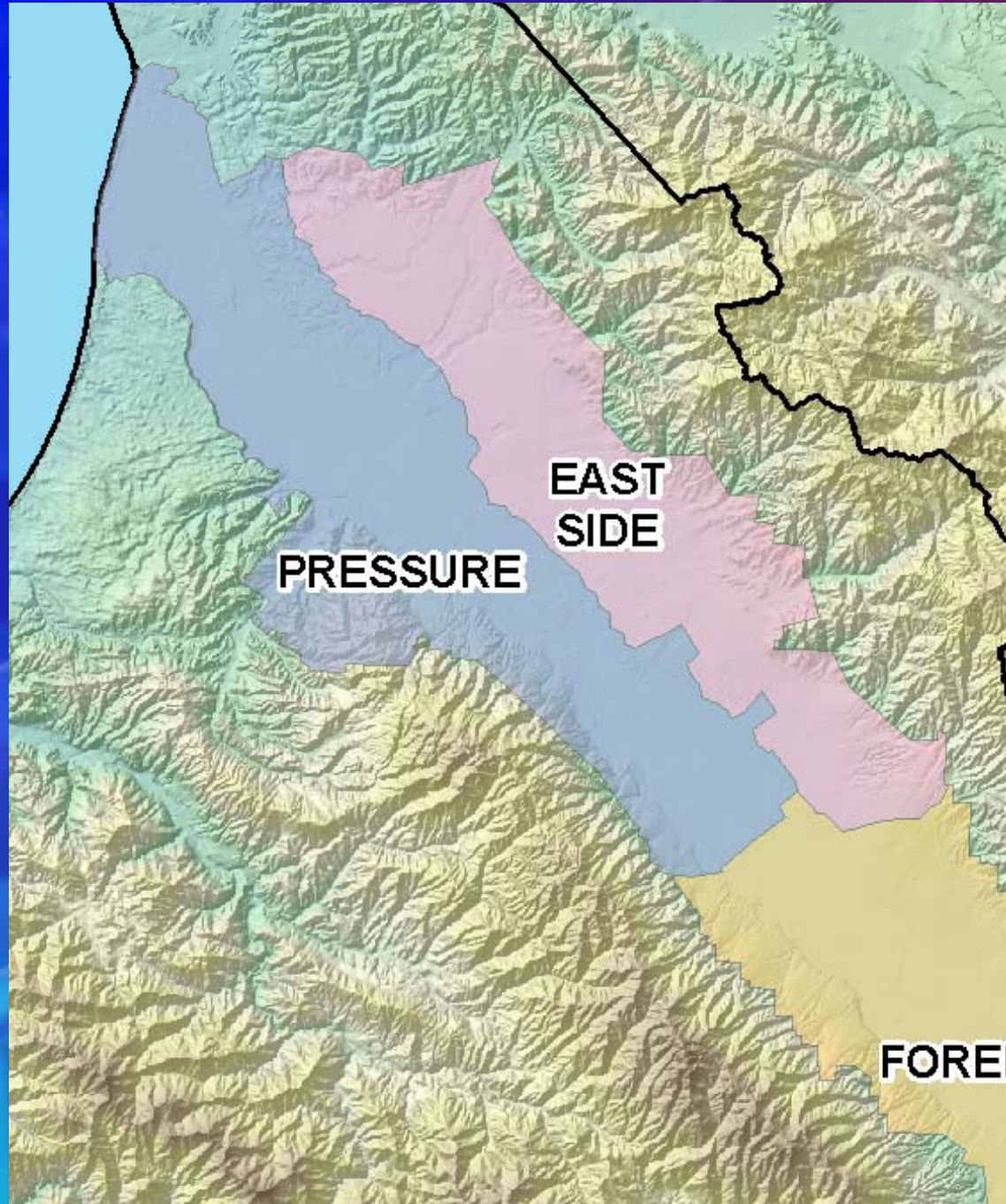
UPPER  
VALLEY





# Cross Section of the Salinas Valley

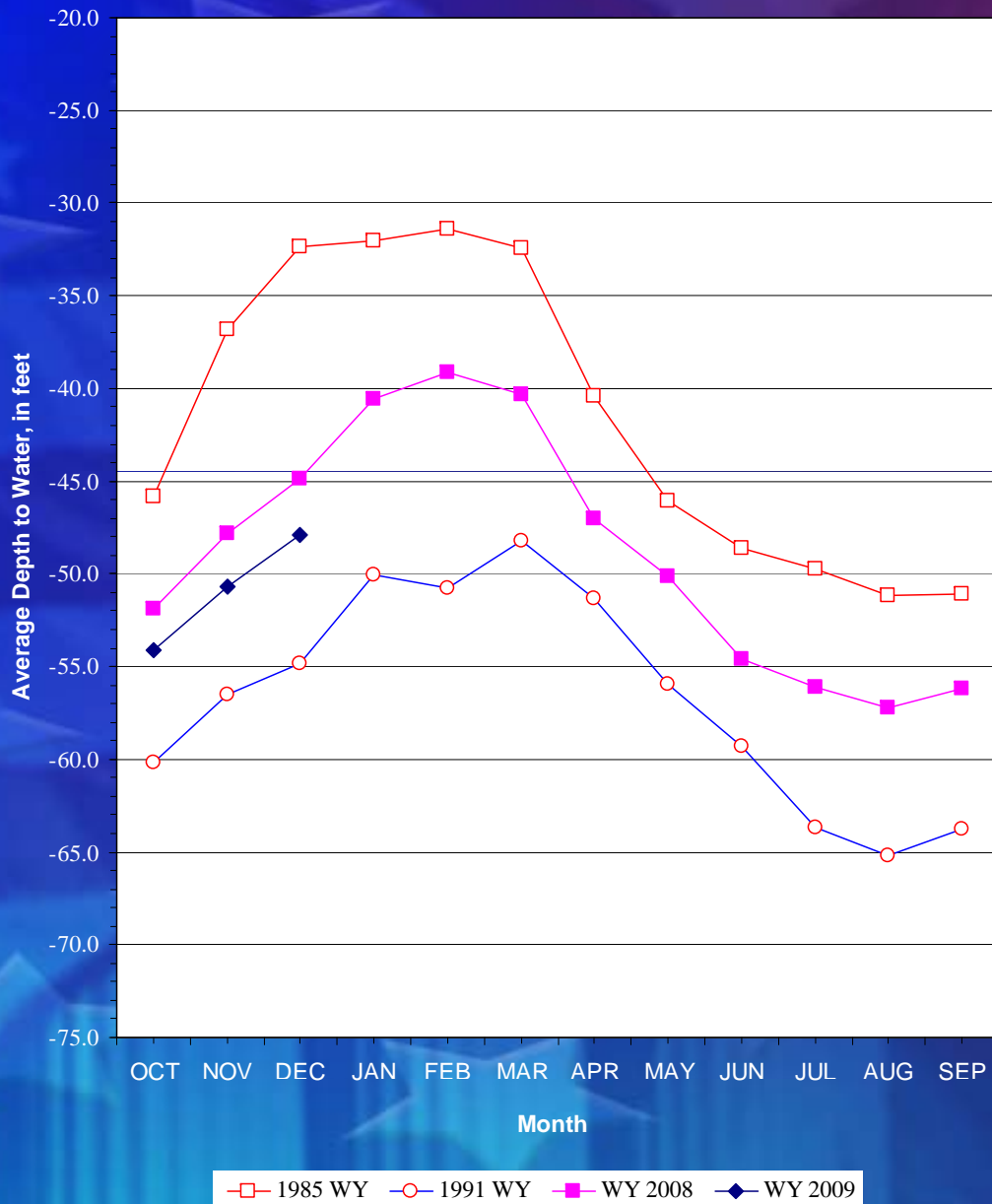


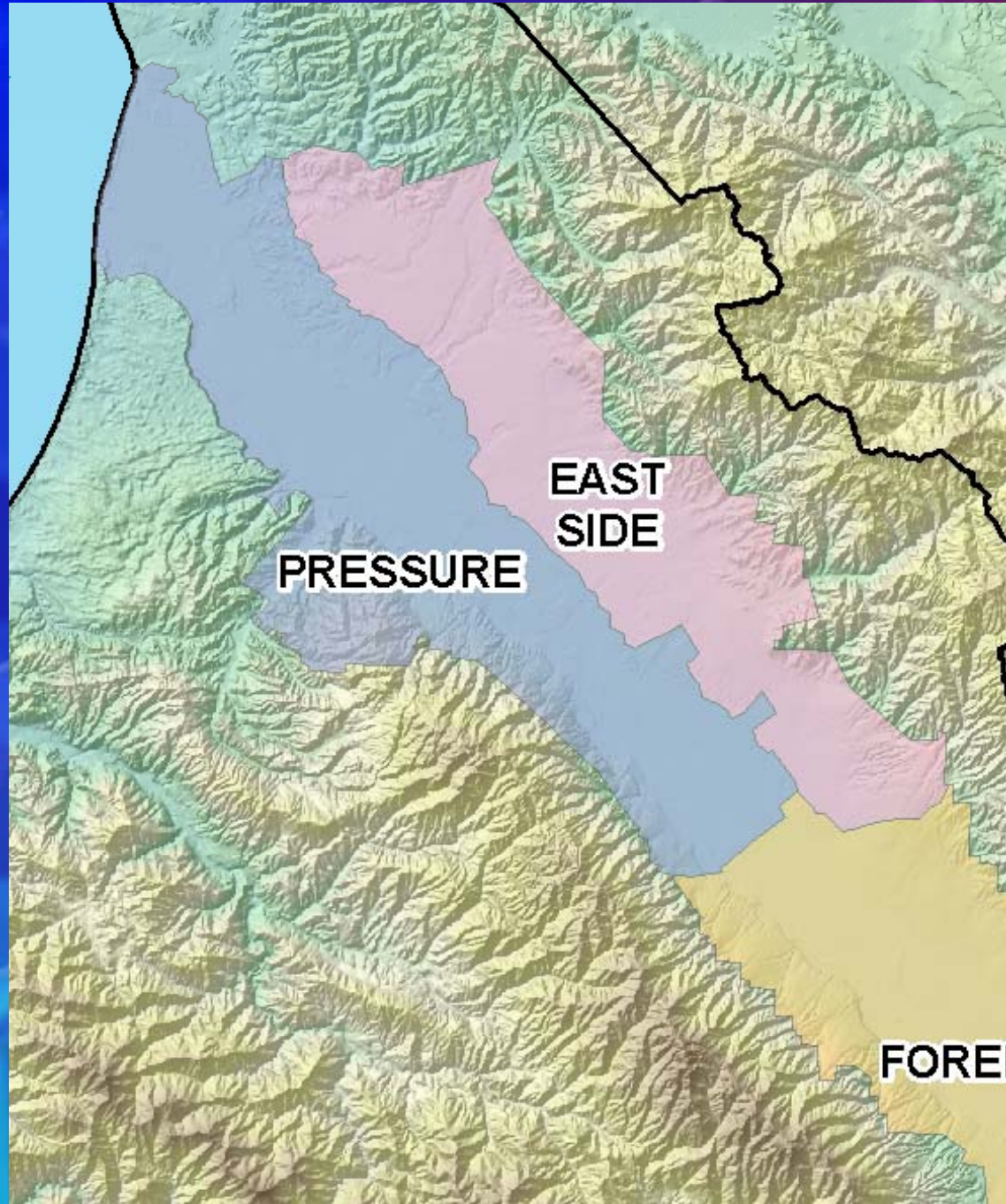




# HISTORIC GROUND WATER TRENDS PRESSURE AREA-180 FOOT AQUIFER

5 Wells

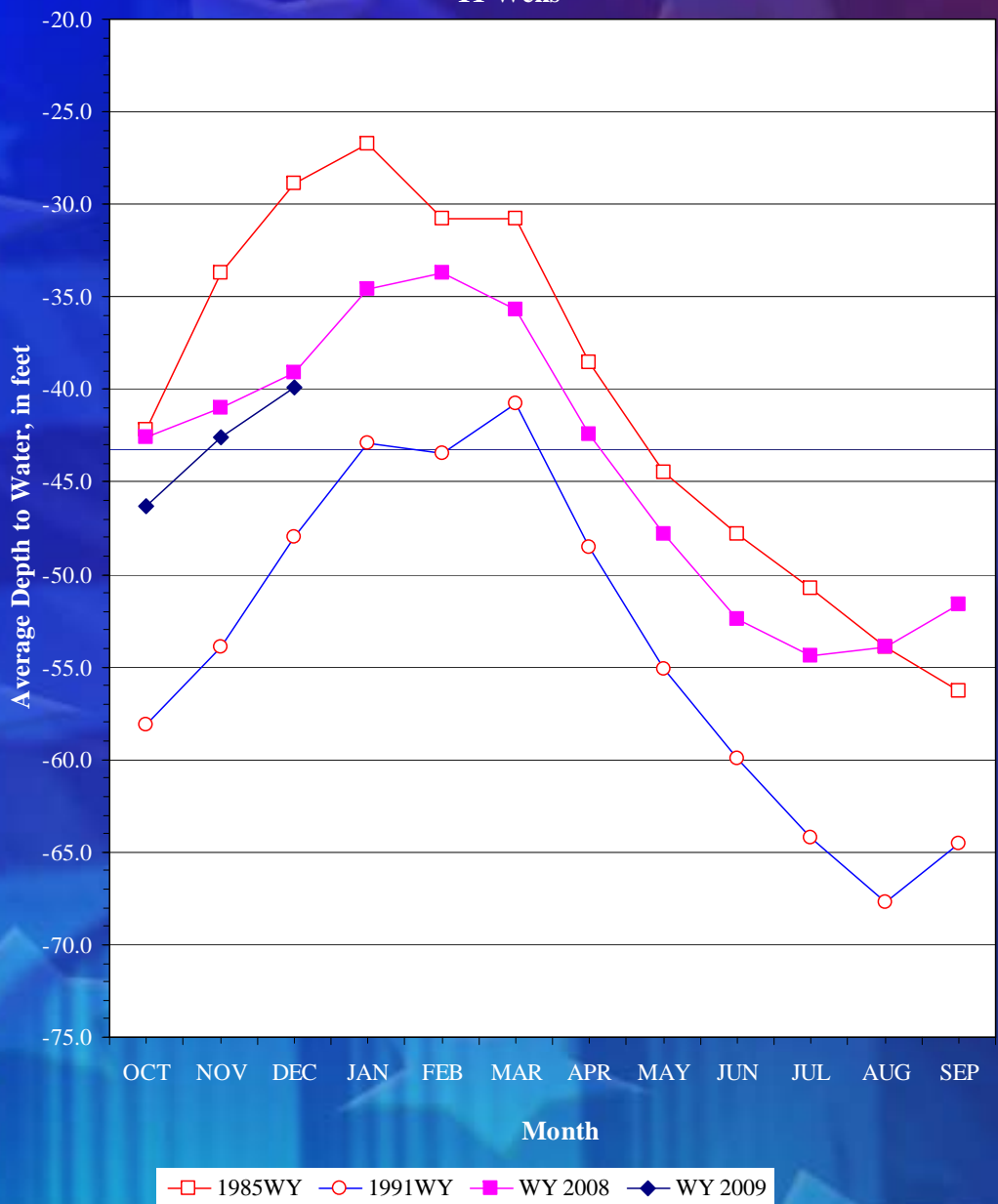






# HISTORIC GROUND WATER TRENDS PRESSURE AREA-400 FOOT AQUIFER

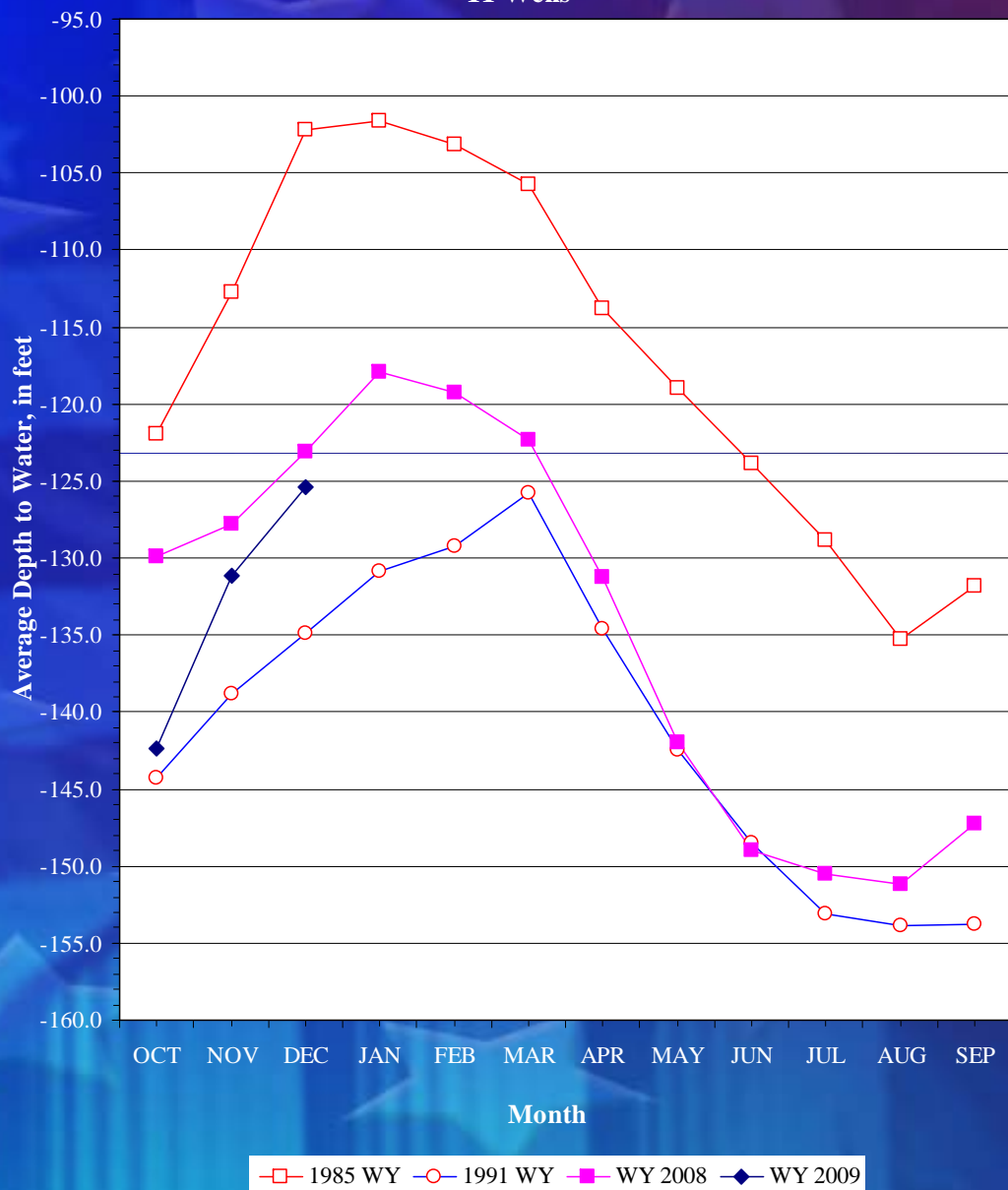
11 Wells

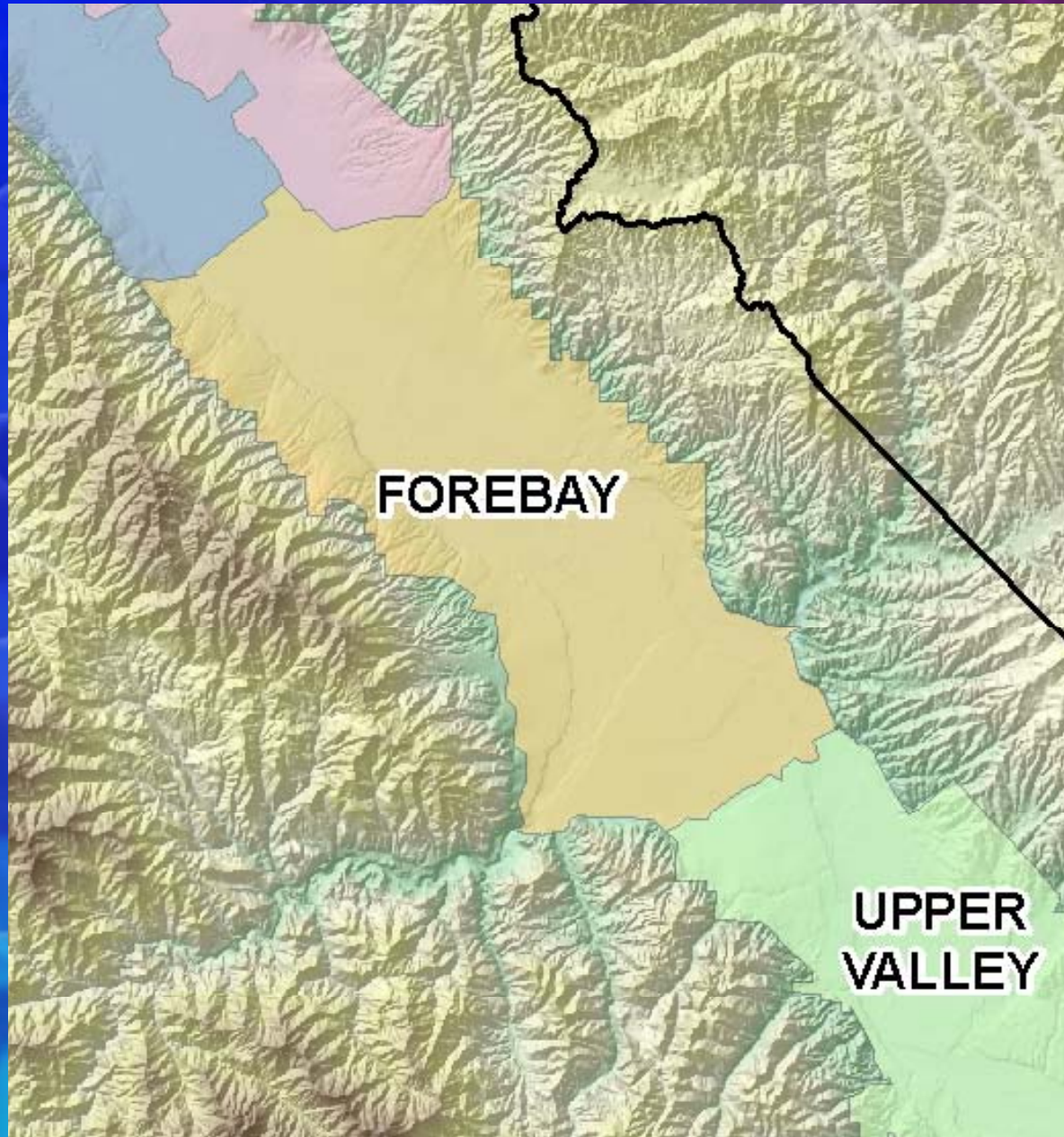






# HISTORIC GROUND WATER TRENDS EAST SIDE AREA 11 Wells





**FOREBAY**

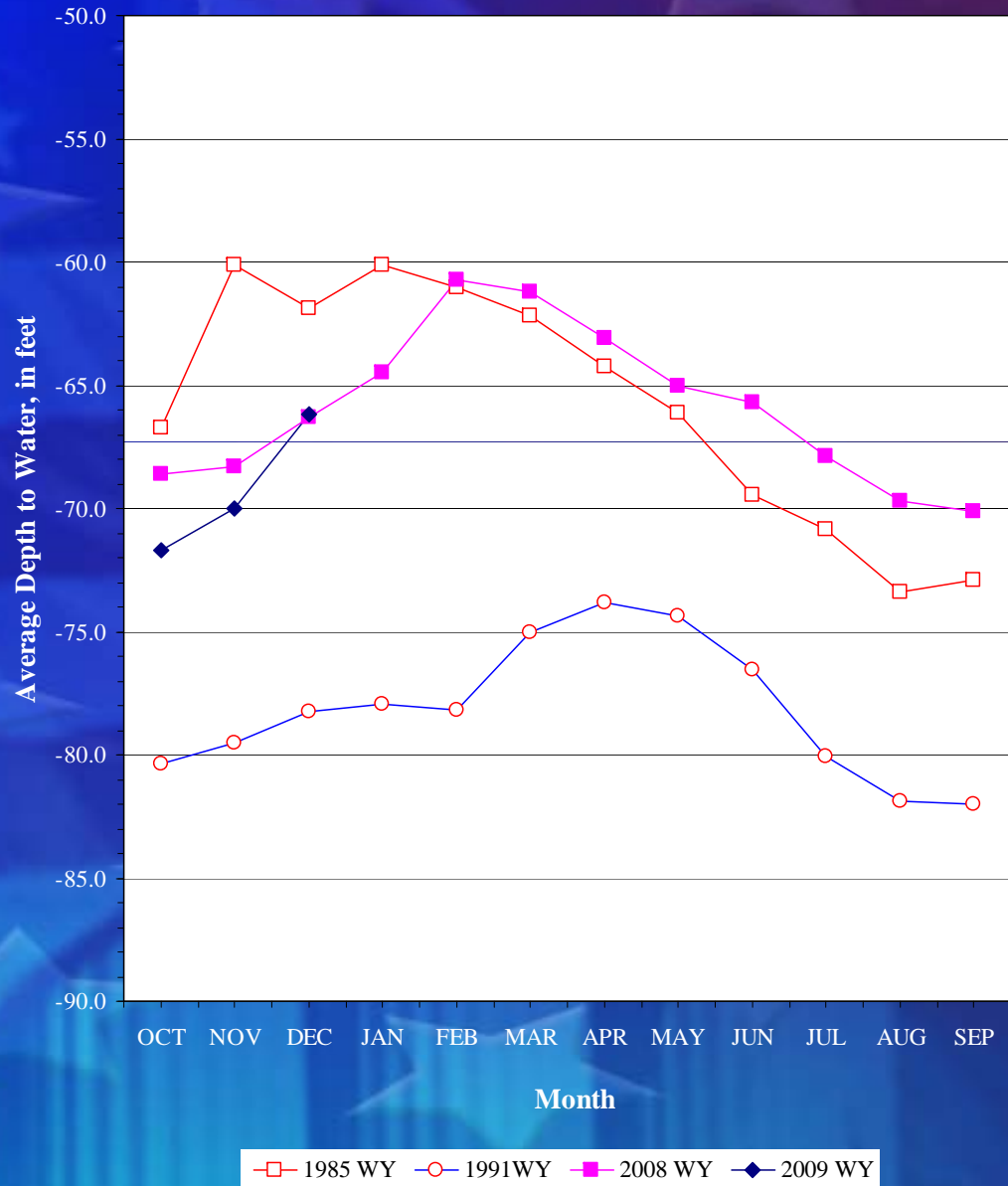
**UPPER  
VALLEY**

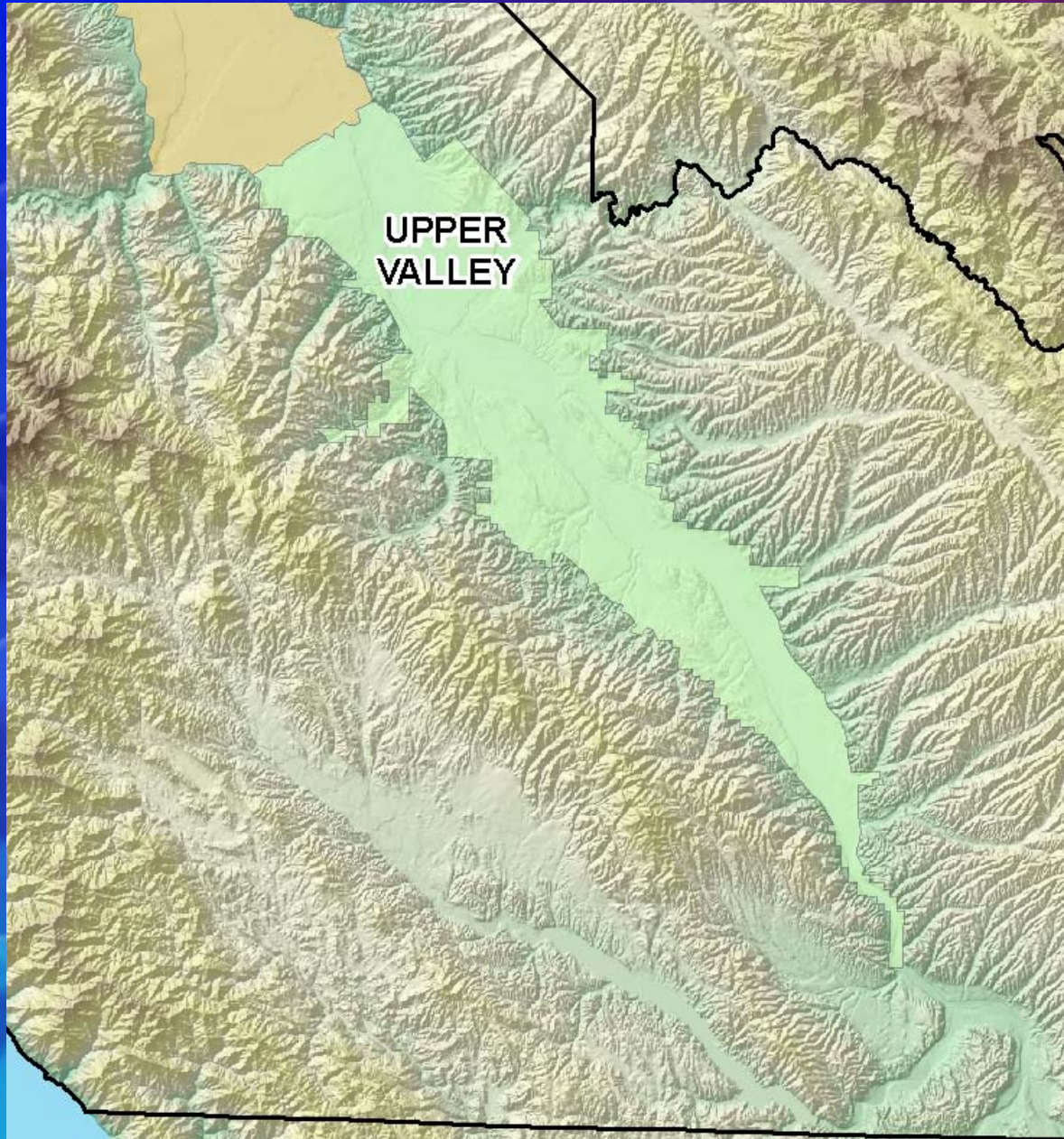


# HISTORIC GROUND WATER TRENDS

## FOREBAY AREA

10 Wells



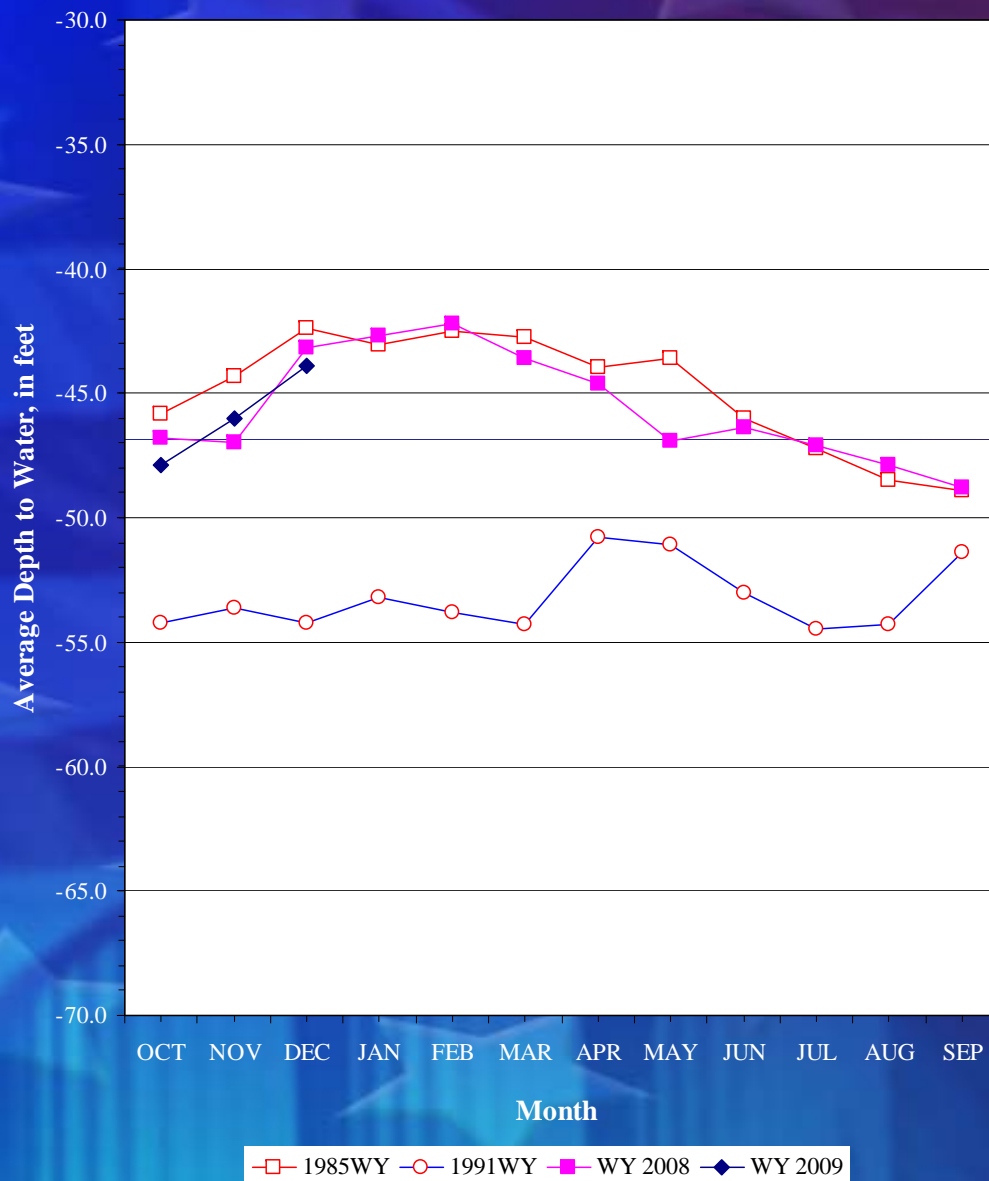




# HISTORIC GROUND WATER TRENDS

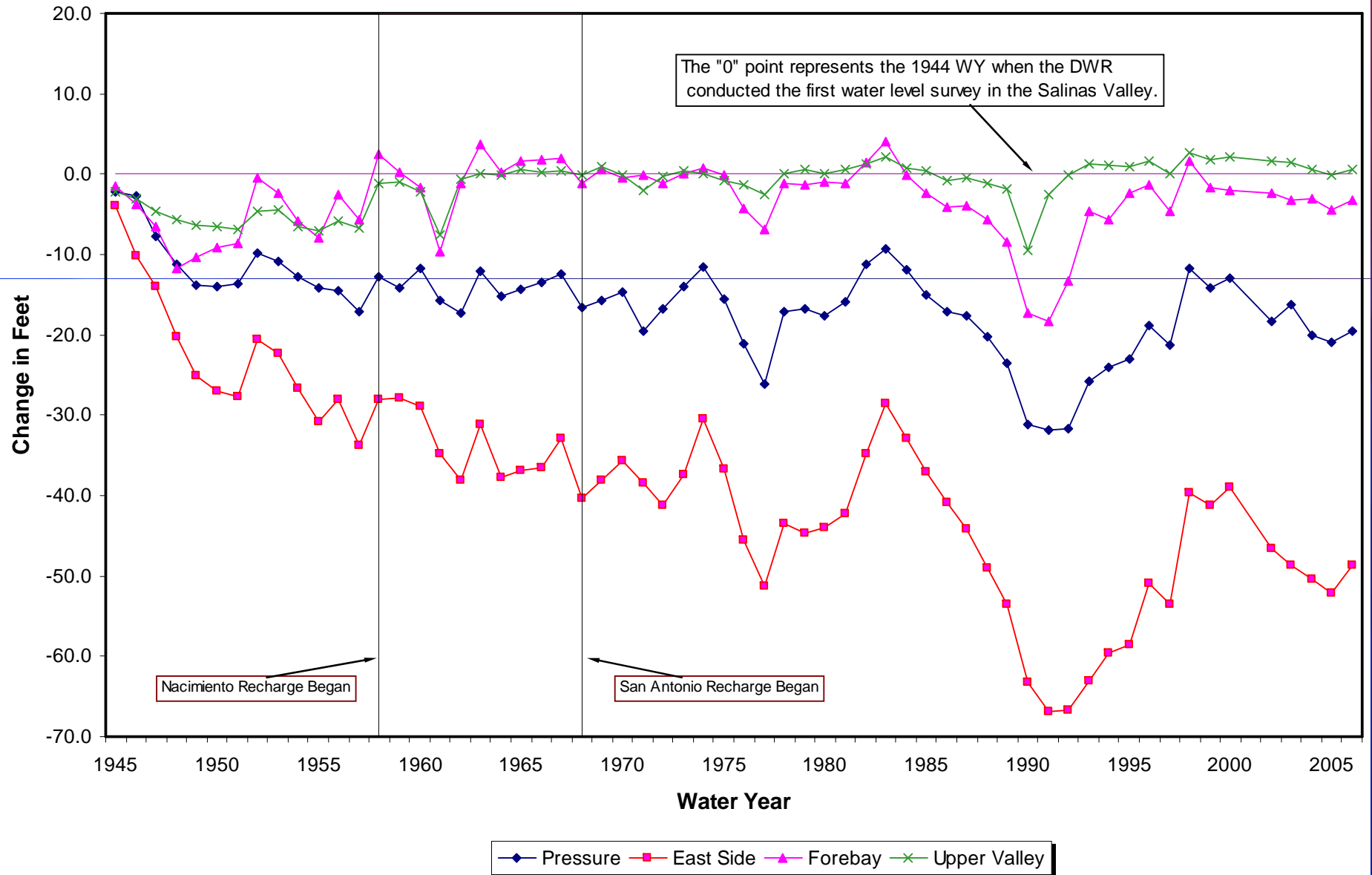
## UPPER VALLEY AREA

9 Wells



# SALINAS VALLEY GROUND WATER LEVELS

## 1945-2006 Annual Averages



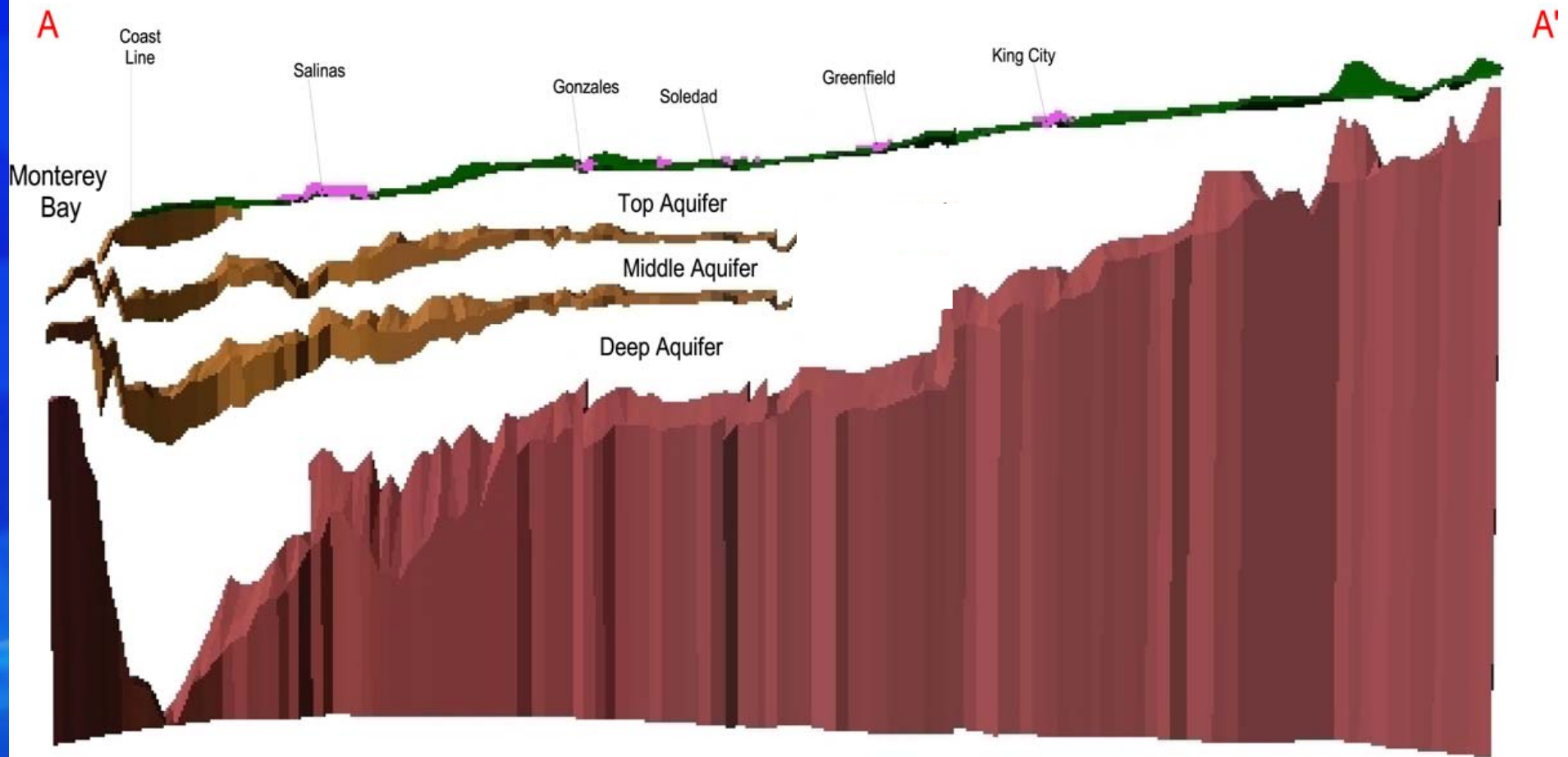


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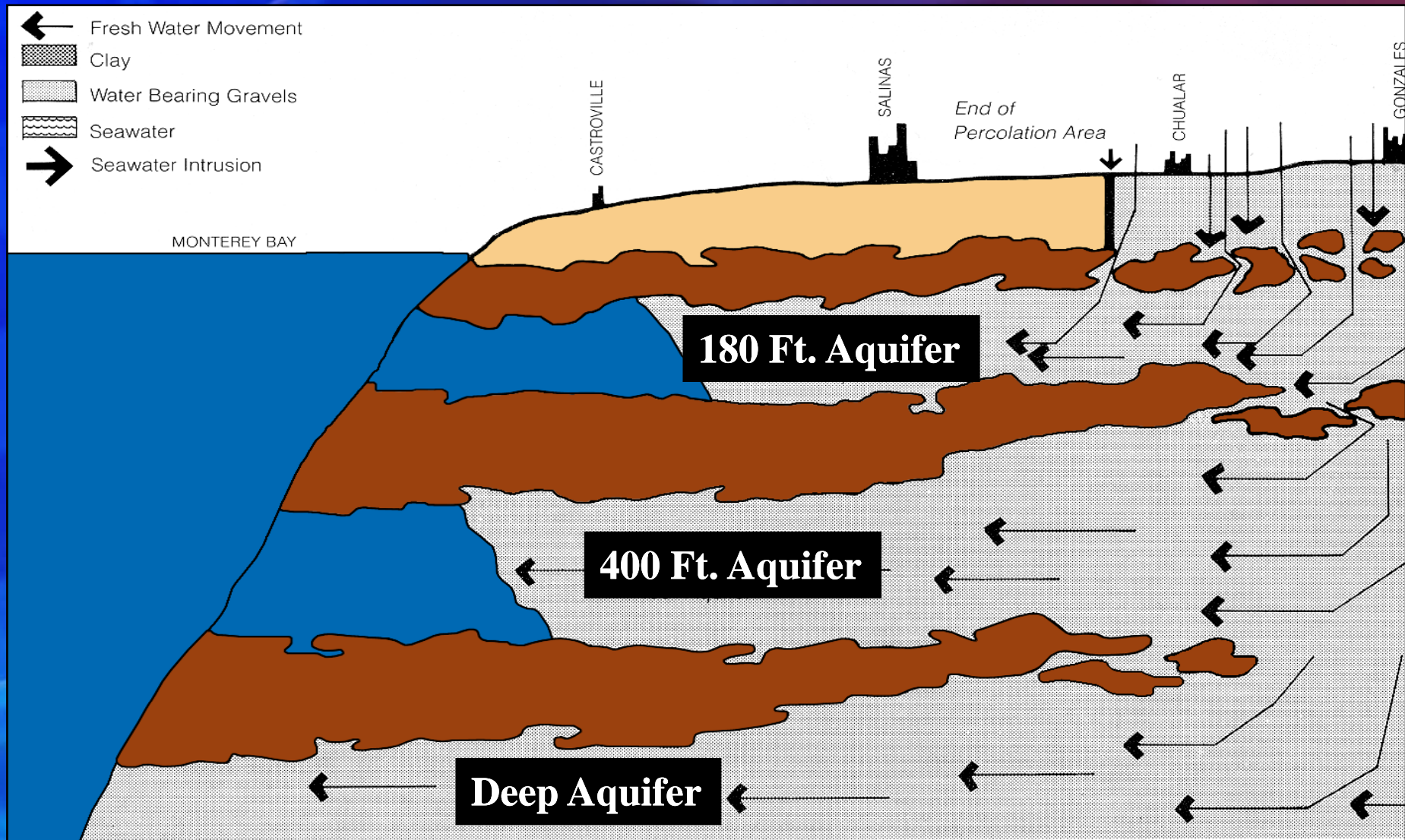


# Cross Section of the Salinas Valley





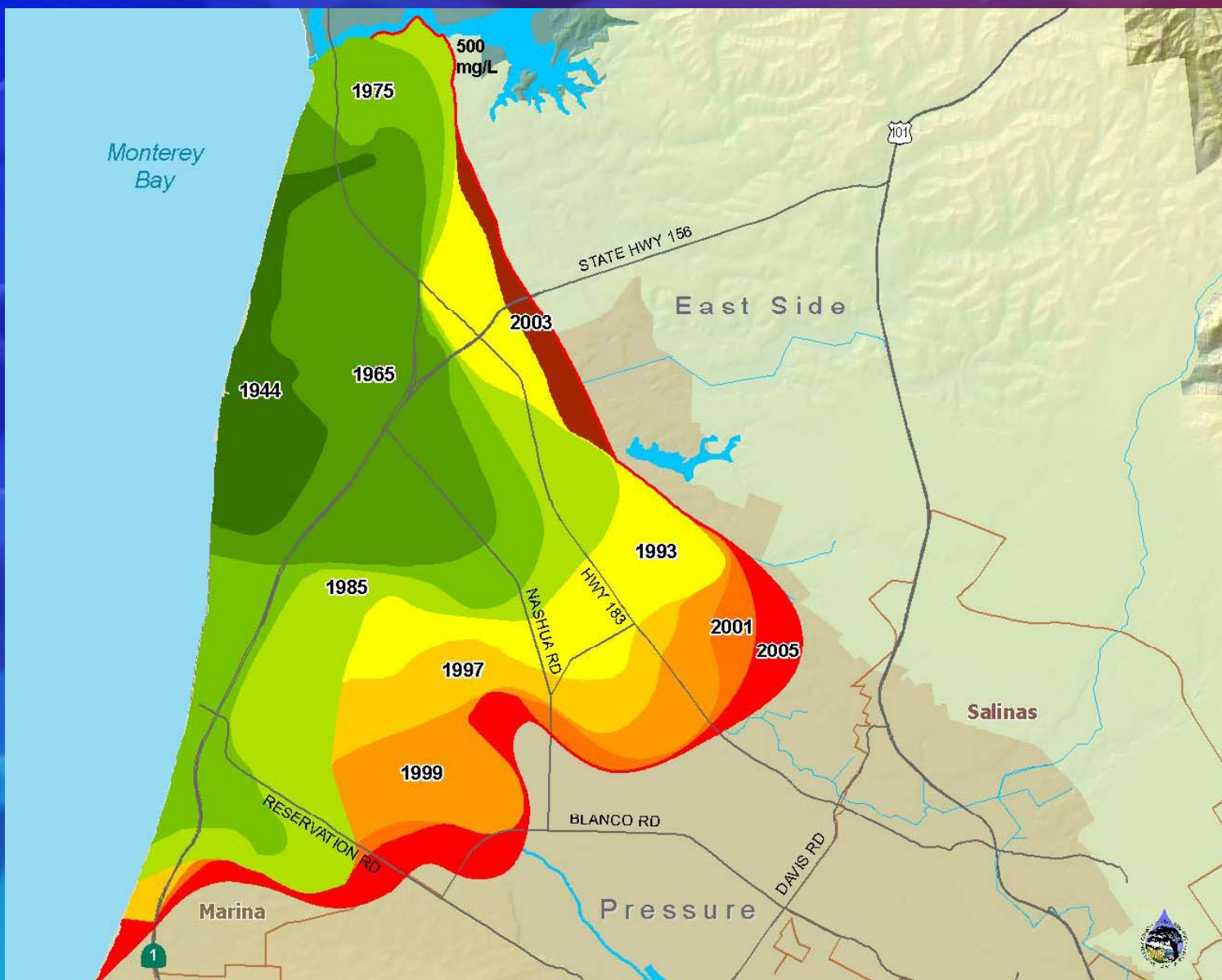
# Cross Section near the Coast





# Why Build It?

## SWI Front – Pressure 180-Foot Aquifer



Source: MCWRA

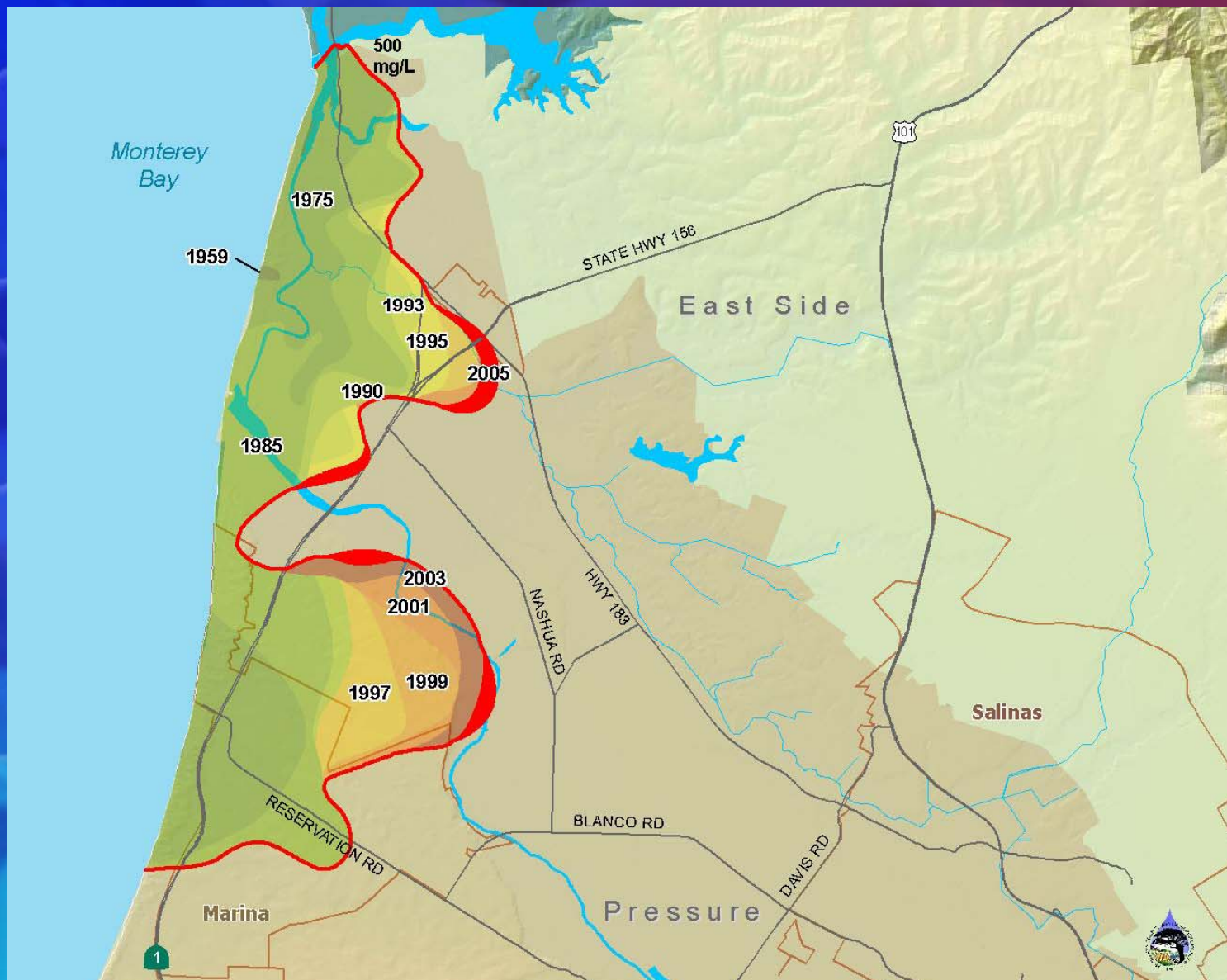
Date: May 2006

Note: The scale and configuration of all information shown hereon are approximate and are not intended as a guide for design or survey work.



# Why Build It? (cont.)

## SWI Front – Pressure 400-Foot Aquifer



Source: MCWRA

Date: May 2006

Note: The scale and configuration of all information shown hereon are approximate and are not intended as a guide for design or survey work.



## Why Build It? (cont.)

- SWI Solution Strategy:
  - Develop a surface water source
  - Move water north to reduce coastal pumping
  - Stop pumping along the coast
- Agency has implemented the following:
  - Nacimiento and San Antonio Reservoirs
  - Monterey County Water Recycling Projects
  - Salinas Valley Water Project



## Why Build It? (cont.)



**Nacimiento Reservoir**  
**Completed in 1957**  
**Lake Capacity 377,900 AF**

**San Antonio Reservoir**  
**Completed in 1967**  
**Lake Capacity 335,000 AF**





# Why Build It? (cont.)



**MC Water Recycling Projects**



# Why Build It? (cont.)

Salinas Valley Water Project



**Nacimiento Spillway  
Modification**

**Salinas River  
Diversion Facility**





05/06/2008





07/02/2008 12:20

Sister wall reinforcement



12/10/2008 10:13



Salinas Rvr Div-08-11-07-48071.jpg



Salinas Rvr Div-08-10-29-45416.jpg

# Left Bank Excavation



11/10/2008 12:20



Salinas Rvr Div-08-11-07-46074.jpg



# Summary

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  - Why it was built?
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# Contact Information

- **Monterey County Water Resources Agency**
  - 893 Blanco Circle
  - 831.755.4860
  - <http://www.mcwra.co.monterey.ca.us>
- **Robert Johnson**
  - Chief of Water Resources Planning
    - 831.755.4860
    - [johnsonr@co.monterey.ca.us](mailto:johnsonr@co.monterey.ca.us)



Questions?





"The water came in a thirty-year cycle. There would be five to six wet and wonderful years when there might be nineteen to twenty-five inches of rain, and the land would shout with grass. Then would come six or seven pretty good years of twelve to sixteen inches of rain. And then the dry years would come ..."

"And it never failed that during the dry years the people forgot about the rich years, and during the wet years they lost all memory of the dry years. It was always that way."










John Steinbeck, *East of Eden*

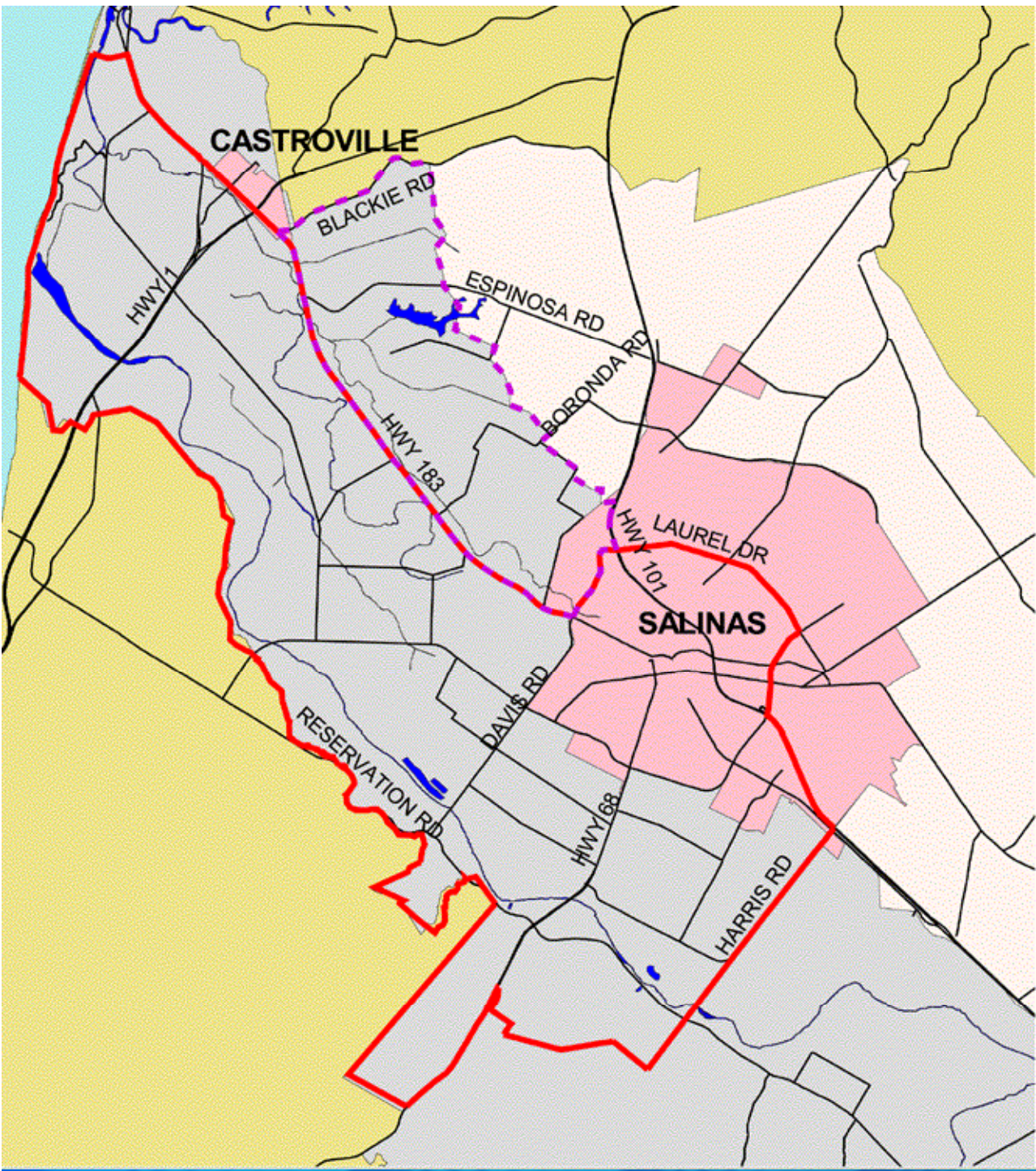
# ORDINANCE 3709 BOUNDARY DELINEATION

January 1, 1995

Pressure 180-Foot Aquifer

Legend:

-  Territory A No Pumping / No New Wells
-  Territory B No New Wells
-  Major Roads
-  Water Bodies
-  Cities/Towns
- Hydrologic Subareas
-  Pressure
-  East Side
- Political Boundaries
-  Monterey County
-  Pacific Ocean



MCWRA